

Figure 1

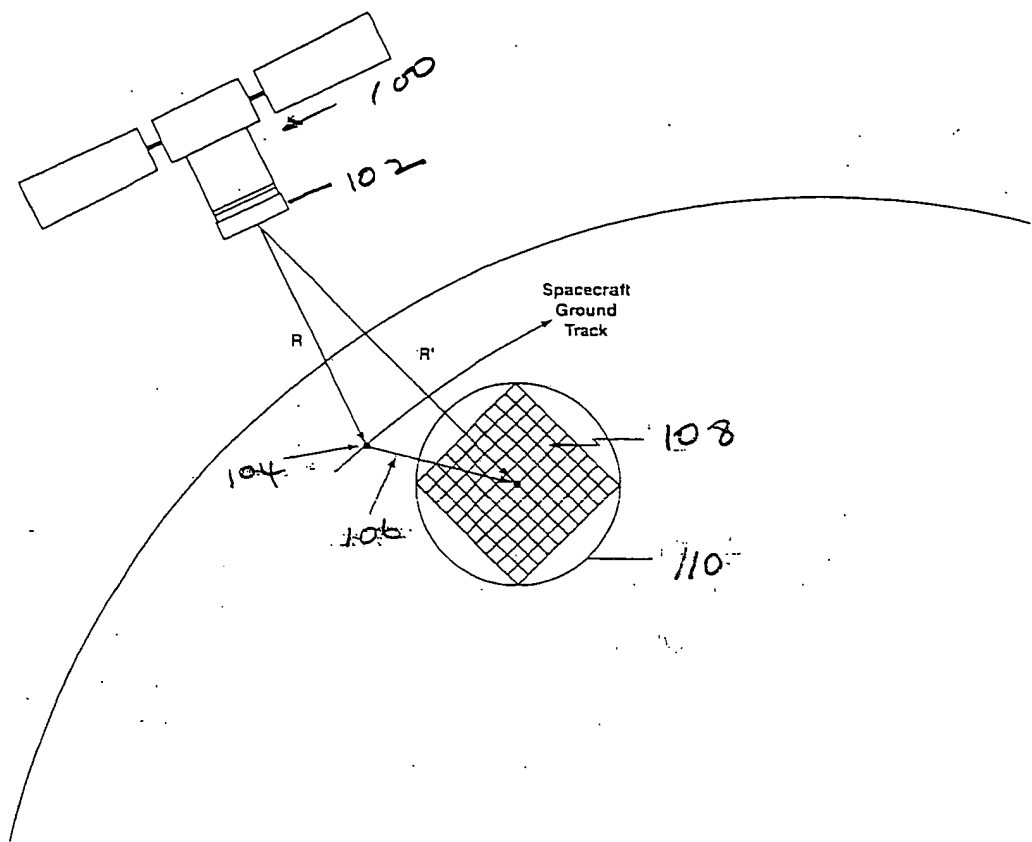
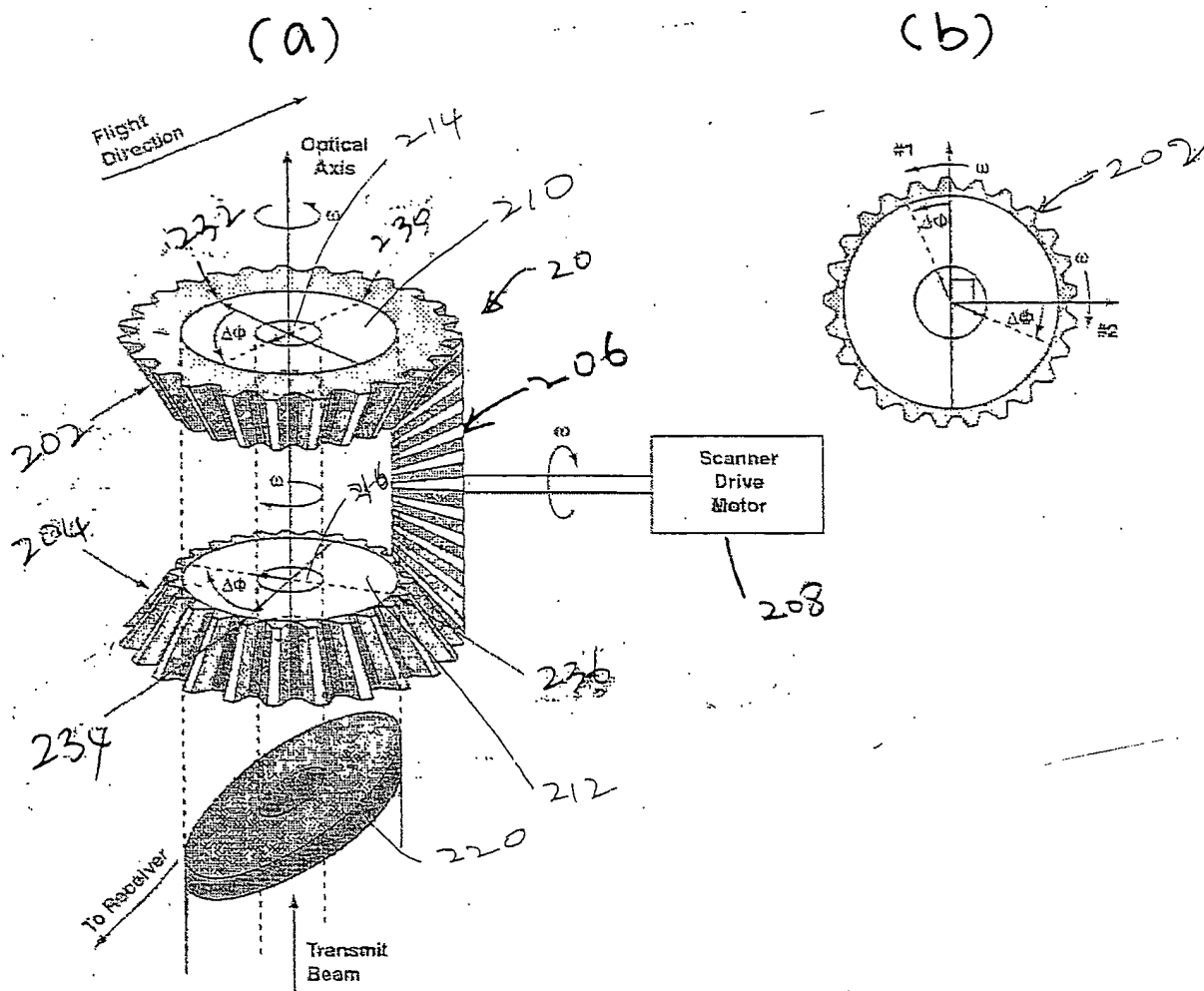


Figure 2



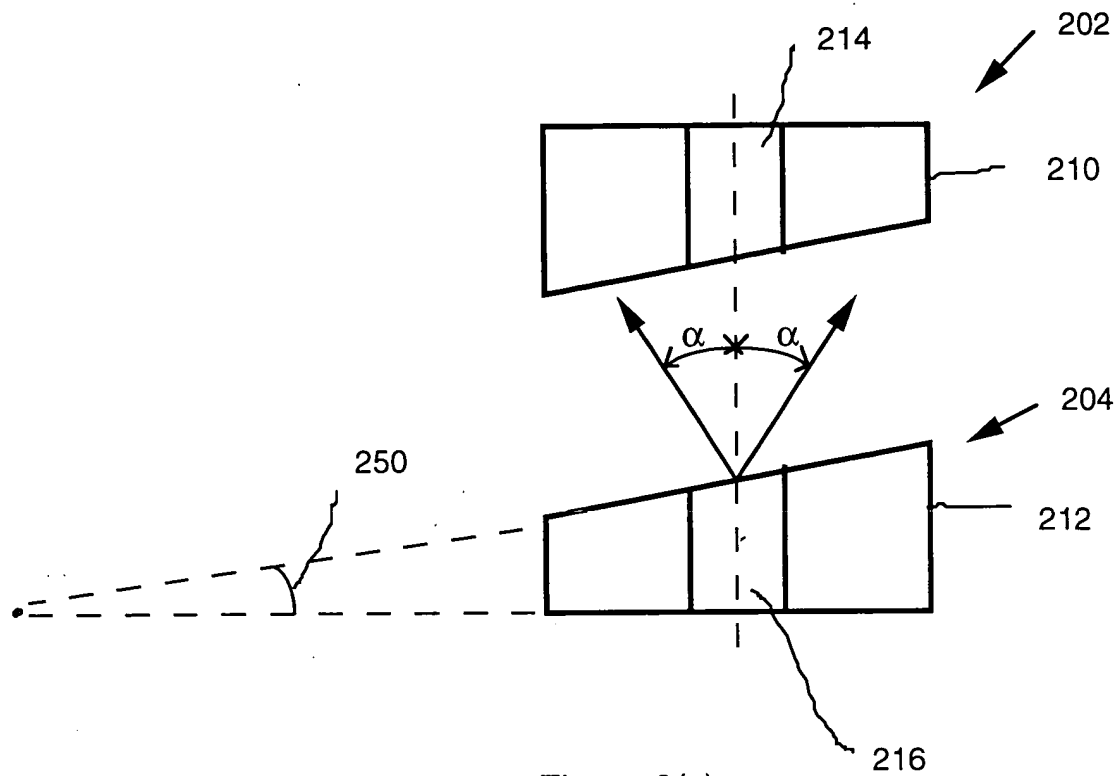


Figure 2(c)

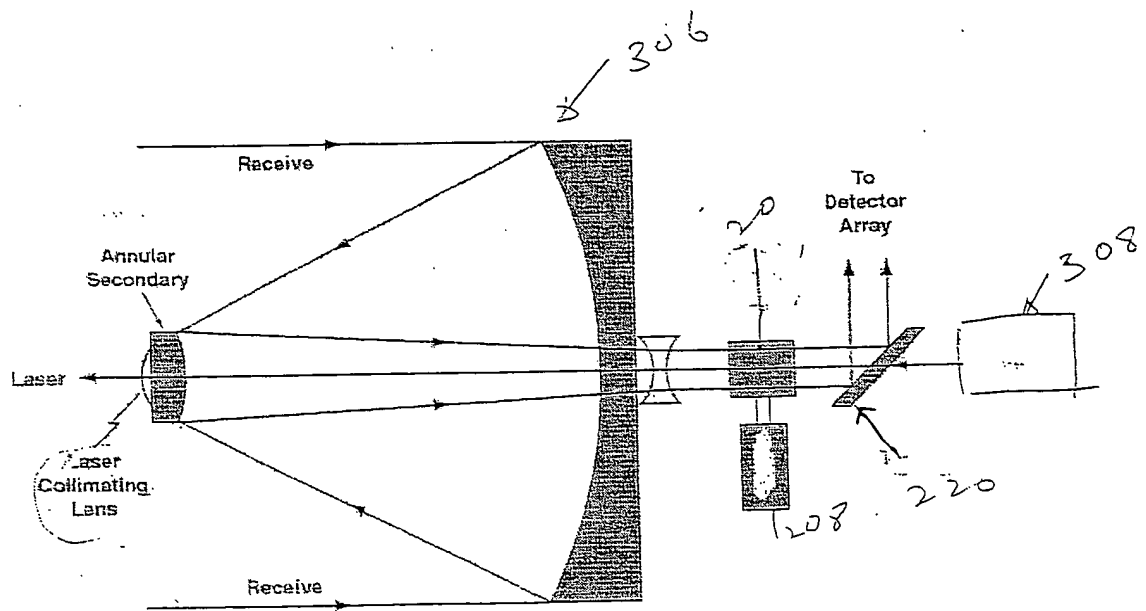


Figure 3

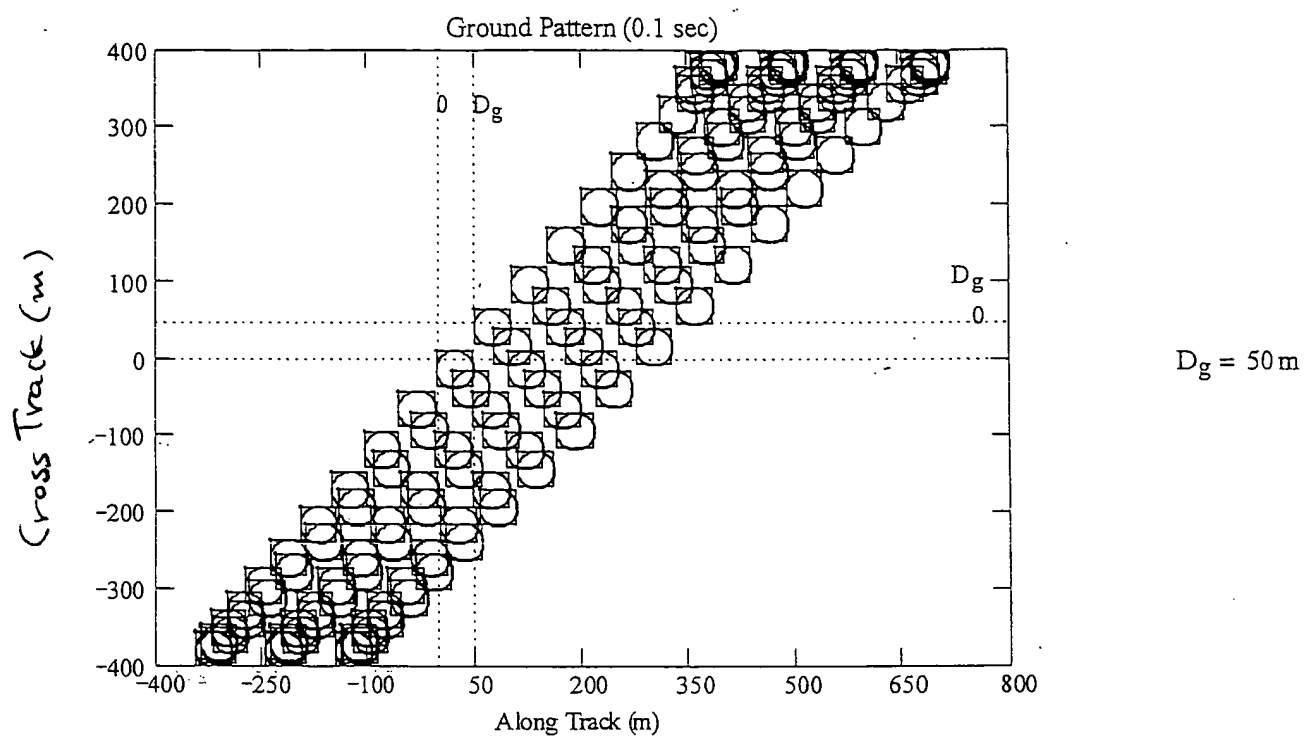
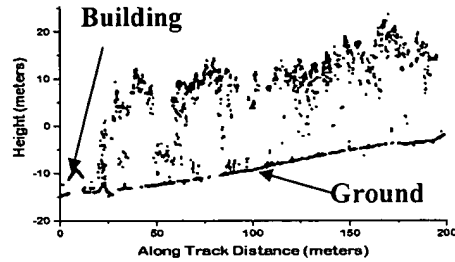


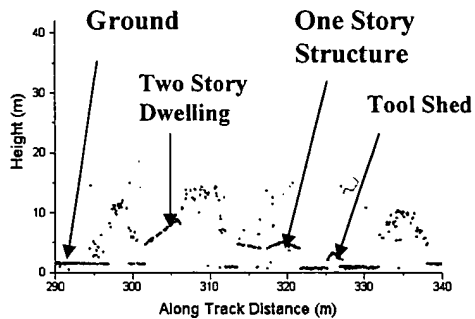
Figure B1

- **Engineering Flight Parameters**

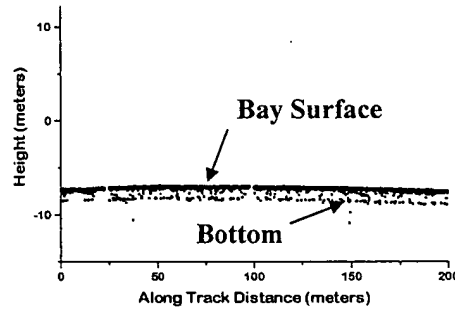
- NASA P-3 Aircraft, Wallops Flight Center
- Locale: Chincoteague, VA & Chesapeake Bay
- Flight Altitudes: 3.5 to 6.7 km (11,000 to 22,000 ft)
- Early afternoon (maximum solar background)
- Laser Energy:  $< 2 \mu\text{J}$  @ 532 nm
- Laser Repetition Rate: 3.8 kHz
- Laser Power:  $\sim 7 \text{ mW}$
- Effective Telescope Diameter: 14 cm
- Mean Signal Strength per Laser Fire:  $\sim 0.88 \text{ pe}$



### Tree Canopy Heights



### Buildings and Trees



### Shallow Water Bathymetry

Figure 5